

REMARKS

The Final Office Action mailed January 12, 2011, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Office Action and therefore is believed to be timely without extension of time. Accordingly, Applicant respectfully submits that this response is being timely filed.

Claims 1-9, 11-22, 24 and 25 were pending in the present application prior to the above amendment. Claims 1-4, 6-9, 14-17 and 19-22 are amended. Claim 26 is added to recite additional protection to which Applicant is entitled. Accordingly, claims 1-9, 11-22 and 24-26 are now pending in the present application, of which claims 1-4, 6-9, 14-17 and 19-22 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 5 of the Office Action rejects claims 6, 7, 9, 11-13, 19, 20, 22, 24 and 25 as obvious based on the combination of U.S. Publication No. 2001/0055841 to Yamazaki, JP 2003-058077 to Takao and U.S. Patent No. 6,355,941 to Yamazaki. Paragraph 22 of the Office Action rejects claims 8 and 21 as obvious based on the combination of Yamazaki '841 and Takao. Paragraph 27 of the Office Action rejects claims 1, 2, 5-7, 10, 13-15, 18, 19, 23 and 24 as obvious based on the combination of Yamazaki '841, Takao, Yamazaki '941 and U.S. Publication No. 2003/0143437 to Ohtsu. Although not included in the list presented at paragraph 27, paragraph 39 of the Office Action rejects claims 4 and 17 as obvious based on the combination of Yamazaki '841, Takao, Yamazaki '941 and Ohtsu. Paragraph 48 of the Office Action rejects claims 3 and 8 as obvious based on the combination of Yamazaki '841, Takao and Ohtsu. Although not included in the list presented at paragraph 48, paragraph 49 of the Office Action rejects claim 16 as obvious based on the combination of Yamazaki '841, Takao and Ohtsu. The rejections are traversed for the reasons advanced in detail below.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in

the knowledge generally available to one of ordinary skill in the art. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. For the reasons provided below, Yamazaki ‘841, Takao, Yamazaki ‘941 and Ohtsu, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

Without conceding the basis for the Examiner’s rejections, independent claims 1, 3, 6 and 8 are amended to recite “an insulating layer covering an edge portion of the semiconductor layer” and independent claims 14, 16, 19 and 21 are amended to recite “forming an insulating layer covering an edge portion of the semiconductor layer,” which is supported in the present specification, for example, by paragraph [0207] (referring to the pre-grant publication of the present specification, *i.e.* U.S. Publication No. 2007/0132377) and Figure 3D. By forming an insulating layer covering an edge portion of a semiconductor layer, a steep step of the semiconductor layer is reduced. “The step can be reduced owing to the insulating layers 341, 342, and 343, and the wiring layer to cover the insulating layers can be formed with favorable coverage without a defect such as break” (paragraph [0207]). This structure avoids a situation whereby “the wiring layer might not be able to cover a steep step and might be disconnected” (*Id.*).

Without conceding the basis for the Examiner’s rejections, independent claims 2, 4, 15 and 17 are amended to recite that “the substance is selected from cadmium selenide (CdSe), potassium tantalite (KTaO₃), cadmium sulfide (CdS), zirconium oxide (ZrO₂), niobium oxide (Nb₂O₅), and tungsten oxide (WO₃),” which is supported in the present specification, for example, by paragraph [0011] of the present application.

Without conceding the basis for the Examiner’s rejections, independent claims 7, 9, 20 and 22 are amended to recite that “the refractory metal is selected from the group consisting of W (tungsten), Cr (chromium), Al (aluminum), Ta (tantalum), Ni (nickel), Zr (zirconium), Hf (hafnium), V (vanadium), Ir (iridium), Nb (niobium), Pd (lead), Pt

(platinum), Mo (molybdenum), Co (cobalt), and Rh (rhodium).” That is, “Ti (titanium)” has been removed from the list of possible refractory metals.

The Applicant respectfully submits that Yamazaki ‘841, Takao, Yamazaki ‘941 and Ohtsu, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

Since Yamazaki ‘841, Takao, Yamazaki ‘941 and Ohtsu do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

At this opportunity, Applicant has amended claims 15 and 17 to correct a minor informality, *i.e.* changing “an” to “the” between “the base film having” and “insulating surface.”

In view of the foregoing, Applicant respectfully requests allowance of the instant application. If a conference would be helpful in expediting prosecution of the instant application, the Examiner is invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,

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